

REMARKS

This is a Response to the Office Action mailed September 3, 2008. Please extend the period of time for response one month, to expire on January 3, 2009. Enclosed are a Petition for an Extension of Time and the requisite fee. Claims 3, 4, 6, 8, 10 and 12-16 were pending, and claims 13-16 have been amended. Claims 3, 4, 6, 8, 10 and 12-16 therefore remain pending for examination. The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Rejection of Claims 14-16 Under 35 U.S.C. § 112

Claims 14-16 were rejected under § 112, second paragraph, as being indefinite because they were directed to an optical recording disc but depended from method claim 13. The claims have been amended as set forth above, and it is respectfully requested that the rejection be withdrawn in light of these amendments.

Rejection of Claims 3, 4, 6, 8, 10 and 12 Under 35 U.S.C. § 102 By Kim

Claims 3, 4, 6, 8, 10 and 12 were rejected under 35 U.S.C. § 102(b) as being anticipated by J. Kim, I. Wang, D. Yoon, I. Park, and D. Shin, *Applied Physics Letters*, 83, 1701 (2003) (“Kim”). The Examiner refers to claims 1-12 in the body of the Office Action (*see* Office Action, p. 2), but it is assumed that this is a simple error as the first page of the Office Action refers to the correct claim numbering. It is respectfully submitted that pending claims 3, 4, 6, 8, 10 and 12 are not anticipated by Kim because Kim fails to identically teach every element of independent claim 3. *See* M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim).

In particular, claim 3 recites an optical recording disc having a “decomposition reaction layer having a light absorption coefficient  $k$  equal to or larger than 0.75 and equal to or lower than 2.0.” The Examiner does not address this language in claim 3, and Applicants are unable to find any teaching or suggestion in Kim regarding such a range for the light absorption coefficient. Instead, Kim simply discloses an optical recording disc having a decomposition reaction layer including platinum oxide. *See* Figure 1 of Kim.

The decomposition reaction layer disclosed by Kim might have any of a variety of light absorption coefficients, and, although the Examiner does not rely upon inherency, it is respectfully submitted that the claimed light absorption coefficient is not inherent in Kim's disclosure. The M.P.E.P. states that in "relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." M.P.E.P. §2112(IV), citing to *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). However, as would be well understood by those skilled in the art, the optical characteristics of a thin film layer will greatly vary depending upon a number of variables, including: impurities contained in the metal, the thin film forming process, vacuum pressure, temperature of the substrate, thin film forming rate, etc. See, e.g., *Technique for Designing, Forming and Estimating Optical Thin Films at a Production Site*, by Takahashi (attached hereto, along with a short translated passage therefrom). Thus, Kim does not disclose nor is it inherent in Kim's disclosure that the light absorption coefficient of the platinum oxide layer disclosed by Kim would lie within the particular range disclosed in claim 3.

For at least these reasons, the Examiner should withdraw the rejection of claim 3 as anticipated by Kim. Claims 4, 6, 8, 10 and 12 depend from independent claim 3 and are allowable as depending from an allowable base claim, as well as for the novel and non-obvious combinations of elements recited therein.

#### Rejection of Claims 3, 4, 6, 8, 10 and 12 Under 35 U.S.C. § 102 By Kikukawa

Claims 3, 4, 6, 8, 10 and 12 were rejected under 35 U.S.C. § 102(b) as being anticipated by T. Kikukawa, T. Nakano, T. Shima, and J. Tominaga, *Applied Physics Letters*, 81, 4697 (2002) ("Kikukawa"). It is respectfully submitted that pending claims 3, 4, 6, 8, 10 and 12 are not anticipated by Kikukawa because Kikukawa fails to identically teach every element of independent claim 3. See M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim).

In particular, claim 3 recites an optical recording disc having a "decomposition reaction layer having a light absorption coefficient  $k$  equal to or larger than 0.75 and equal to or

lower than 2.0.” The Examiner does not address this language in claim 3, and Applicants are unable to find any teaching or suggestion in Kikukawa concerning such a light absorption coefficient. Instead, Kikukawa simply discloses an optical recording medium having a decomposition reaction layer including platinum oxide. *See* p. 1, col. 1 of Kikukawa. For reasons similar to those discussed above, Kikukawa does not disclose nor is it inherent in Kikukawa’s disclosure that the light absorption coefficient of the platinum oxide layer disclosed by Kikukawa would lie within the particular range disclosed in claim 3.

For at least these reasons, the Examiner should withdraw the rejection of claim 3 as anticipated by Kikukawa. Claims 4, 6, 8, 10 and 12 depend from independent claim 3 and are allowable as depending from an allowable base claim, as well as for the novel and non-obvious combinations of elements recited therein.

#### Rejection of Claims 13-16 Under 35 U.S.C. § 103

Claims 13-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim or Kikuawa as applied above and further in view of U.S. patent no. 5,401,609, issued to Haratani *et al.* (“Haratani”) and Salama, *RF Sputtered Aluminum Oxide Films on Silicon*, Toronto University Department of Electrical Engineering (1970) (“Salama”). It is respectfully submitted that pending claims 13-16 are patentable over Kim or Kukawa and Haratani and Salama at least because these references would not be combined as suggested by the Examiner.

In particular, although the references of record in isolation may suggest aspects disclosed in claim 13, a person skilled in the art would not have made the combination suggested by the Examiner. Haratani teaches a recording layer comprising AgNiO that is formed by sputtering at 0.55 Pa (*see* col 9, ll. 55-68), while Salama teaches the formation of an aluminum oxide film with a power density in the range of 0.5 to 3 W/cm<sup>2</sup> (*see* Abstract). The disclosures of these references focus on sputtering variables used to form thin film layers having specific chemical compositions. Neither reference discloses, teaches or suggests that such pressures and power densities may be used to form a platinum oxide layer. Since the optical characteristics of a thin film are so dependent upon the particular manufacturing processes and materials used (*see, e.g.,* attached translated passage from Takashi), a person skilled in the art would not be

motivated to apply sputtering variables used for one thin film to produce a completely different thin film. As a result, it would not have been obvious to use the sputtering variables disclosed in Haratani or Salama to form the thin films disclosed by Kim or Kikukawa. Indeed, one skilled in the art would be discouraged from attempting to apply Haratani's or Salama's teachings to a platinum oxide layer. The Examiner appears to be relying solely upon hindsight reconstruction in order to pick and choose sputtering variables from disparate references to reject claim 13 as obvious.

For at least these reasons, claim 13 is patentable over the cited references. Claims 14-16 depend from claim 13 and are allowable as depending from an allowable base claim, as well as for the novel and non-obvious combinations of elements recited therein.

**Conclusion**

In light of the above remarks, Applicants respectfully submit that all rejections have been traversed, and that all pending claims are allowable. Applicants therefore respectfully request that the Examiner reconsider this application and timely allow all pending claims. The Examiner is encouraged to contact Mr. Evans by telephone to discuss the above and any other distinctions between the claims and the applied references, if desired. If the Examiner notes any informalities in the claims, the Examiner is further encouraged to contact Mr. Evans by telephone to expediently correct such informalities.

Respectfully submitted,  
SEED Intellectual Property Law Group PLLC

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/Jason T Evans/  
Jason T. Evans  
Registration No. 57,862

Enclosure:

*Technique for Designing, Forming and Estimating Optical thin Film at a Production Site, Kazuhiro Takahashi, January 22, 2001, pp. 227-228. (+ partial translation)*

701 Fifth Avenue, Suite 5400  
Seattle, Washington 98104  
Phone: (206) 622-4900  
Fax: (206) 682-6031

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